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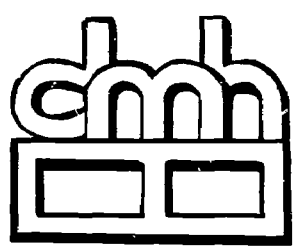
ABSTRACT

Statistics of mental illness in Maryland are provided in the areas of diagnostic distribution of admissions and resident patients, size and nature of patient population, percentage change in daily cost per patient, employee-patient ratios, length of hospitalization, diagnostic treatment trends, patient mortality, and Baltimore's specific problems and needs. Data is also presented concerning classifications of patients such as geriatric, adolescent, schizophrenic, drug addict, mentally retarded, suicidal, and alcoholic. Graphic illustrations and narratives accompany the statistical data. (RD)

MENTAL HEALTH AND MENTAL ILLNESS IN MARYLAND



A Report From The
Statistics Section

MARYLAND DEPARTMENT OF MENTAL HYGIENE

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The State of Maryland, under the leadership of Governor Marvin Mandel, has placed a high priority on the delivery of comprehensive health services to its citizens. A major step in this program has been the establishment of the Department of Health and Mental Hygiene which will centralize direction of the Departments of Health, Mental Hygiene, Juvenile Services and the Comprehensive Health Planning Agency, as well as a number of other health-related agencies into one office.

By this coordinated effort, we pledge that Maryland's health programs will be combined into one total effort which will provide excellent care and service at the minimum possible cost.

Sound planning must, of necessity, be based on thorough and accurate statistical studies. It is for this reason that the Department of Health and Mental Hygiene is pleased to issue this publication which was compiled and edited by Kurt Gorwitz, Sc.D., Director of Statistics and Vital Records of the Maryland Department of Health and Mental Hygiene.

This report points out in a meaningful manner health progress made in Maryland in the past, as well as delineating problem areas which we will attack in the future. It must become a springboard for action programs not only in Maryland, but throughout the Nation.

Neil Solomon

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July 1, 1969

The Department of Mental Hygiene is pleased to release this second edition of its report on "Mental Health and Mental Illness in Maryland." It consists of a compilation of newsletters published monthly during the past ten years by the Department's Statistics Section together with graphic material highlighting major trends. In many cases newsletters have been revised and updated so that much of the data included here has not been previously released.

The text for this report was written by Dr. Kurt Gorwitz, Director of Statistics. All art work and tabulations were prepared by Miss Evelyn Hart and Mrs. Elizabeth Wilburn, respectively, of Dr. Gorwitz's staff. Mrs. Donna L. Fallin performed all secretarial work.

James E. Carson, M.D.
Commissioner

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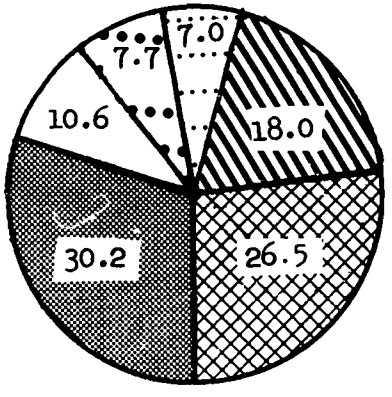
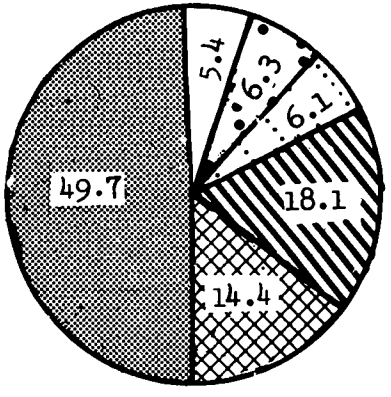


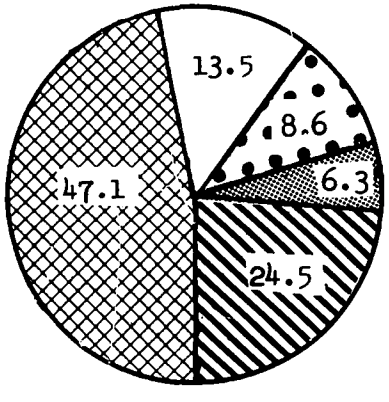
1963

ADMISSIONS

Schizophrenic Reactions
Alcoholism
Diseases of Senium
Psychoneurotic Reactions
Personality Disturbances
All Others



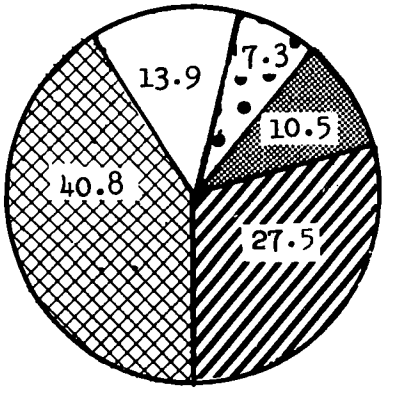
1968



1963

RESIDENT PATIENTS

Schizophrenic Reactions
Diseases of Senium
Mental Deficiency
Alcoholism
All Others



1968

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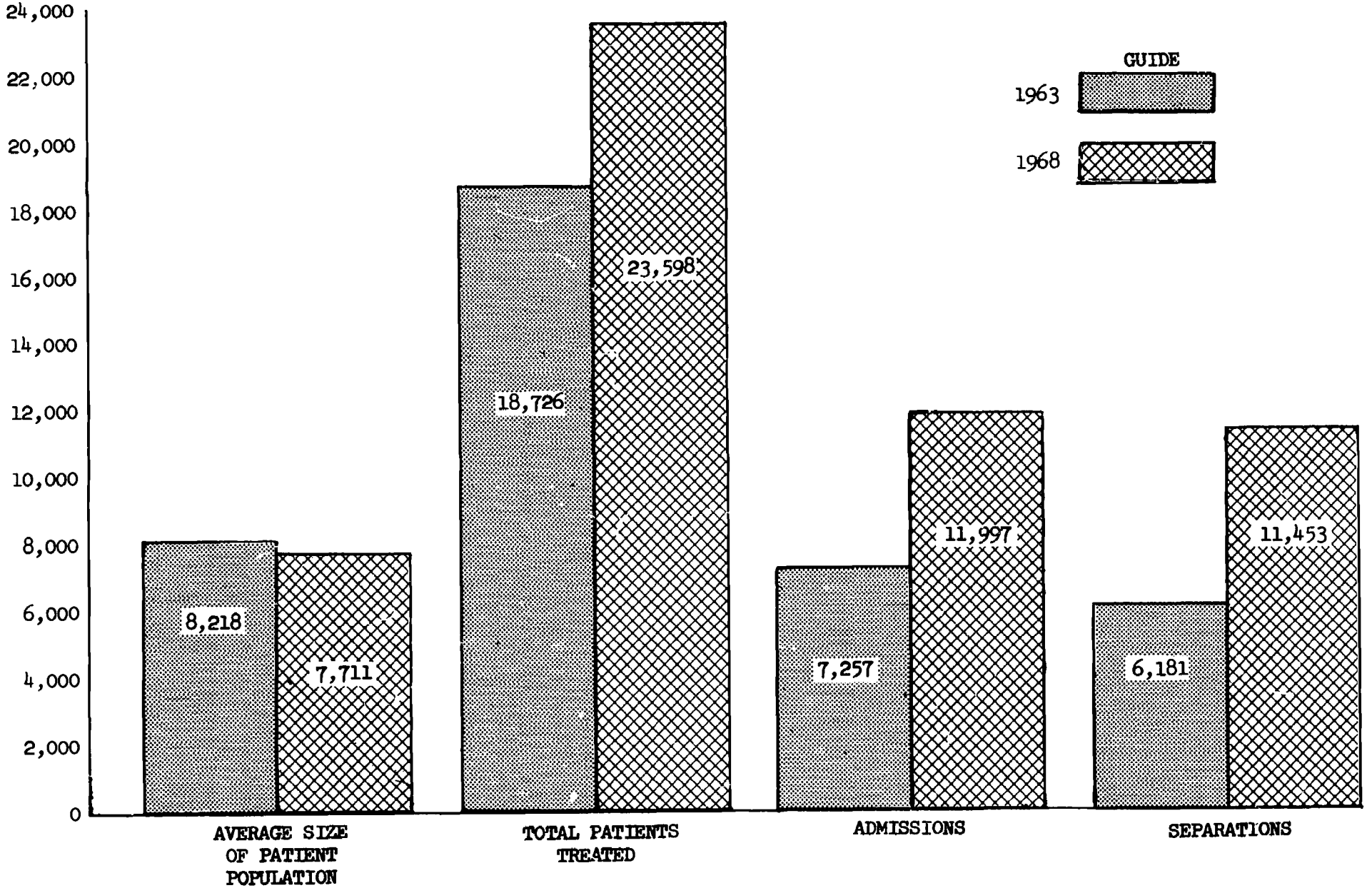
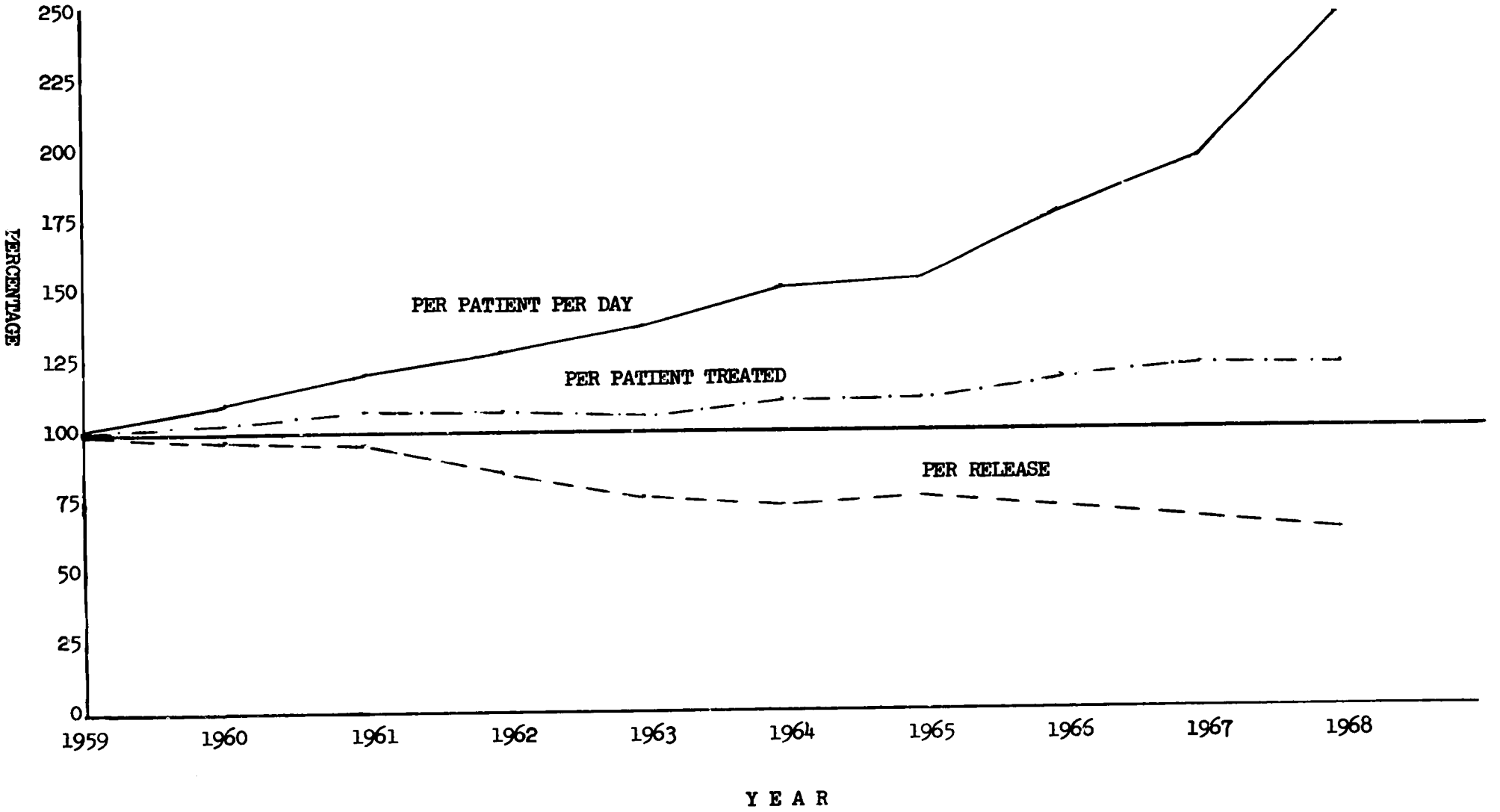
AVERAGE SIZE OF PATIENT POPULATION, TOTAL PATIENTS TREATED, ADMISSIONS AND SEPARATIONS - 1963 AND 1968



GRAPH 3

PERCENTAGE CHANGE IN AVERAGE COST PER PATIENT PER DAY, AVERAGE COST PER PATIENT TREATED DURING YEAR AND AVERAGE EXPENDITURE REQUIRED TO PRODUCE ONE RELEASE
MARYLAND PSYCHIATRIC HOSPITALS, 1959-1968



FACT SHEET FOR 1969 FISCAL YEAR

In 1969 Maryland's hospitals for the mentally ill again treated a record number of patients, reflecting primarily the continuing rise in admissions of alcoholics. Ten years ago these facilities treated 15,853 patients; by 1969 this had increased 61.1 percent to 25,541. However, due to shortened periods of hospitalization of new admissions and the gradual, continuing decrease in the number of long term patients, the average daily size of the patient population declined 16.8 percent during this period from 8,952 to 7,451.

FISCAL YEAR	AVERAGE SIZE OF PATIENT POPULATION	TOTAL NUMBER TREATED DURING YEAR	ADMISSIONS	TOTAL SEPARATIONS
1959	8,952	15,853	4,164	4,367
1961	8,428	16,783	5,266	5,425
1963	8,218	18,726	7,257	7,173
1965	8,076	19,873	8,551	8,006
1967	8,006	22,899	11,091	11,298
1969	7,451	25,541	14,085	14,130
NET CHANGE	-1,501	+9,688	+9,921	+9,763
PERCENT CHANGE	-16.8	+61.1	+238.3	+223.6

A similar upward trend has been observed in virtually all private psychiatric hospitals, psychiatric units of general hospitals, clinics and other community centers reporting to the Maryland Psychiatric Case Register. For example, total admissions to the 102 clinics are estimated to have increased 10.5 percent from 17,399 in 1968 to 19,220 in 1969. Since comparable data have been reported by other states, the question is frequently posed whether or not this reflects a rising incidence of mental illness. This can not be readily answered since the numeric relationship between number of individuals treated in psychiatric facilities and total number of mentally disturbed or ill is not known. However, it is generally believed that the rate of occurrence of most mental illnesses has not changed appreciably and that these expanding figures therefore primarily reflect the growing acceptance and usage of psychiatric hospitals and clinics for the short term intensive treatment of alcoholism and acute psychoneurotic and personality disturbances. Recent legislation and court decisions have intensified these trends.

Rosewood, the larger of Maryland's two hospitals for the mentally retarded, last year operated at 21.0 percent in excess of capacity and therefore persisted in its policy of restricting admissions to a level consonant with available space and staff. Although the patient population has increased from 2,144 in 1959 to the current 3,090, Maryland's ratio of patients to total state population is 86.4 (per 100,000), or 11.7 percent below the national average of 97.8. In an effort to resolve this chronic problem, the Department is engaged in a three-pronged program involving construction of new residential retardation facilities on a regional basis, development with the Health Department of coordinated community-based services as alternatives to hospitalization, and removing emotionally disturbed children from Rosewood, allowing conversion of two buildings for the care of the mentally retarded.

MARYLAND'S MENTAL HOSPITALS FIVE YEARS AFTER DESEGRFGATION

Admissions to Maryland's four major mental hospitals were for the first time placed on a regional basis in January, 1963. Since that time, the majority of all patients admitted to each of these facilities has been white. However, this desegregation plan did not provide for the transfer of patients already in residence. Since many of these continue to be hospitalized, integration has been gradual and concentrated primarily in the short term active treatment areas. Latest available data (as of December 31, 1967) indicate that 60.9 percent of all nonwhite patients and 9.2 percent of all white patients are at Crownsville. The comparable figures for those admitted since January, 1963 are 32.2 and 19.1 percent, respectively.

PERCENT OF PATIENTS IN EACH HOSPITAL NONWHITE

DATE	TOTAL	CROWNSVILLE	EASTERN SHORE	SPRING-FIELD	SPRING GROVE
DEC. 31, 1962	22.6	100.0	0.0	0.0	0.0
DEC. 31, 1963	23.4	85.9	7.6	6.2	4.5
DEC. 31, 1964	23.9	78.2	10.7	8.9	7.1
DEC. 31, 1965	24.9	73.4	14.9	11.5	8.9
DEC. 31, 1966	25.5	71.0	16.6	13.2	9.9
DEC. 31, 1967	25.6	69.4	18.2	14.3	9.8

Prior to this change in policy, white admissions had in effect been on a regional basis (to three hospitals) while nonwhite admissions had been limited to one facility (Crownsville). The revision thus brought mental hospitals considerably closer to some segments of the nonwhite population. As a result, although both the number of white and nonwhite admissions have continued to increase, the latter figure has been rising at a faster pace. Latest available data (for the year ending June 30, 1967) indicate that 28.3 percent of all patients admitted to the above facilities were nonwhite as compared with the 26.2 percent reported five years earlier. However, this change has been selective and concentrated among the nonpsychotic. For example, among patients admitted for psychoneurotic and personality disorders the percent nonwhite increased from 20.8 to 29.5 during this time period.

Proportionally, nonwhite admissions to the state hospitals have continued to be twice as frequent as white. In part, this is related to the concentration of nearly half of all Maryland Negroes but less than ten percent of the state's white residents in Baltimore's inner core slum areas where rates of most types of treated mental illnesses and of other public health problems are substantially above average. In part, also, this reflects the much greater use of alternative psychiatric services (particularly in privately operated hospitals and in private practice) by the white middle class. Since state hospitals are only one of a variety of psychiatric resources available to the community, desegregation of these facilities by itself can therefore not necessarily be expected to provide the opportunity for adequate care to meet the needs of all population segments. That is, programs to meet these issues and problems must involve all available resources and services and can not be limited to state operated facilities alone.

THE COST OF HOSPITALIZATION

The average total cost of treating a patient in Maryland's psychiatric hospitals from admission until ultimate discharge decreased forty percent during the past twelve years and is now at its lowest level. As indicated in the following table, while average daily per patient expenditures more than tripled during this period, increased turnover resulting primarily from shortened periods of hospitalization of new admissions produced a continuing decline in the cost per live discharge.

FISCAL YEAR	AVERAGE NUMBER OF HOSPITALIZED PATIENTS	TOTAL PATIENTS TREATED	LIVE DISCHARGES	DAILY PER PATIENT COST	COST PER PATIENT TREATED	COST PER LIVE DISCHARGE
1956	9,530	15,019	2,511	$3.38	$785.55	$4,698.58
1960	8,576	16,268	3,953	5.08	977.09	4,021.09
1964	8,035	19,424	7,197	7.05	1,067.37	2,880.74
1968	7,711	23,598	11,221	11.11	1,328.55	2,793,98
PERCENT CHANGE (1968 vs. 1956)	-19.1	+57.1	+346.9	+228.7	+69.1	-40.5

Hospital expenditures increased an average of nine percent annually between 1956 and 1968. In terms of daily cost per patient, this represents a total rise of 228.7 percent (from $3.38 to $11.11). However, during the same time period, the number of patients treated each year rose 57.1 percent (from 15,019 to 23,598) and live discharges increased 346.9 percent (from 2,511 to 11,221) while the average daily number of patients declined 19.1 percent (from 9,530 to 7,711). In 1956 an average expenditure of $4,698.58 was required to produce each of that year's 2,511 discharges. The average cost for each of the 11,221 discharges in 1968 was $2,793.98.

While these data reflect a general reduction in the length of hospitalization of virtually all diagnostic categories of patients, they also relate to the expanding use of state hospitals for intensive, short term treatment of acute nonpsychotic disturbances. Individuals with diagnoses such as alcoholism, acute brain syndromes, psychoneurotic disorders and personality disturbances now account for a majority of resident patients and for more than two-thirds of all admissions. Among those currently accepted for hospitalization, half or more in most diagnostic groups are released within six weeks and better than 90 percent are returned to the community within one year.

These statistics indicate that Maryland's mental hospitals are in a state of rapid transition. The long term chronically ill no longer predominate and their proportion of the patient population can be expected to decline further. Concomitantly, an increasing percentage of all patients will be acutely ill and will be hospitalized only for brief periods. As this trend persists, the average daily per patient cost must be expected to rise further, ultimately approaching comparable figures for general hospitals. Continuing increases in the number of patients treated and an additional appreciable decline in the total cost of each treatment episode can also be anticipated.

CAPACITY, PATIENT POPULATION SIZE AND OCCUPANCY RATES

Latest patient data indicate that Maryland's mental hospitals operated at an average 104.9 percent of capacity while institutions for the retarded were at a 116.9 percent level. Comparable data based on each hospital's highest daily patient figures during the year indicate an effective overcrowding of 10.7 and 20.1 percent, respectively, for these two types of facilities. Statistics for the year ending June 30, 1969 are summarized in the following table.

	TOTAL	PSYCHIATRIC HOSPITALS	INSTITUTIONS FOR RETARDED
AVERAGE PATIENT POPULATION	10,541	7,451	3,090
MAXIMUM PATIENT POPULATION	11,038	7,863	3,175
CAPACITY*	9,745	7,102	2,643
OCCUPANCY RATE			
BASED ON AVERAGE POPULATION	108.2	104.9	116.9
BASED ON MAXIMUM POPULATION	113.3	110.7	120.1

* BASED ON AMERICAN PSYCHIATRIC ASSOCIATION RECOMMENDED 80 SQUARE FEET PER BED IN SINGLE ROOMS AND 70 SQUARE FEET PER BED IN DORMITORY AREAS.

Occupancy rates varied between hospitals and within units of the same facility. While maximum overcrowding, 18.3 percent, occurred at Springfield virtually all of the hospitals operated at 100 percent or more of indicated capacity. Only Eastern Shore had an occupancy rate of less than 90 percent. All of the psychiatric hospitals have experienced a gradual reduction in occupancy rates averaging one percent per year, primarily resulting from a decreasing patient population. However, comparable data for Maryland's two institutions for the retarded show virtually no change in recent years since new construction has barely kept pace with the increasing number of patients.

Nearly twenty years have elapsed since a series of newspaper articles on "Maryland's Shame" produced a commitment to extensive, continuing remedial action. The current existence of substantial overcrowding, often in old and non-functional buildings, despite large scale construction and a 20 percent decline in the average size of the patient population, should be a matter of grave concern. It should be recognized that this chronic situation is neither conducive to effective patient treatment nor to employee morale. Elimination of this problem is attainable either through a continued large scale building program or by the development of a coordinated network of community based programs and services providing effective alternatives to hospitalization.

EMPLOYEE-PATIENT RATIOS

The ratio of employees to patients in Maryland's four regional psychiatric hospitals* has more than doubled since 1950. As shown in the following table, this change has been caused mainly by an increase in the number of employees. The average size of the patient population in these hospitals, which increased until 1955, has since declined to slightly below the level of 1950.

FISCAL YEAR	AUTHORIZED POSITIONS	AVERAGE SIZE OF PATIENT POPULATION	AUTHORIZED EMPLOYEES PER 100 PATIENTS
1950	1,719	7,844	21.9
1960	3,225	8,516	37.9
1964	3,553	7,821	45.4
1966	3,784	7,825	48.4
1967	3,986	7,730	51.6
1968	4,188	7,435	56.3

This rising employee-patient ratio is primarily related to a continuing change in the composition of the patient population resulting from a six fold increase in admissions (from 1,953 in 1950 to 11,512 in 1968) and a nine fold increase in live releases (from 1,233 in 1950 to 10,970 in 1968). Eighteen years ago 65 percent of all patients had been hospitalized 5 years or more, 20 percent had been under care between one and five years and the remaining 15 were hospitalized less than one year. These percentages are now 45, 25 and 30 respectively. Patients hospitalized for the short-term treatment of acute disturbances require much greater staff services than do chronic patients hospitalized for extended time periods.

Latest available national statistics (for 1967) provide some indication on the relationship of employee-patient ratios to patient turnover and release rates. Arkansas, Colorado and Nebraska (with 76.4, 105.1 and 83.3 employees per 100 patients, respectively) all had more live releases than admissions. The average size of their patient population decreased 53.9, 53.7 and 23.1 percent in the last five years. Alabama, Florida and Virginia (with 27.5, 47.7 and 37.4 employees per 100 patients, respectively) all had more admissions than releases. They were the only states with a reported patient population increase during this five year period.

It should be recognized that data on authorized staff can be deceptive since they do not take into account vacant positions. On June 30, 1968, 409 of the 4,188 authorized positions were vacant so that the ratio of employees to staff was reduced from 56.3 to 50.8. Further, more than four employees are required to fill one position on a 24 hour a day, seven days a week basis and many staff members are not directly involved in inpatient treatment. For example, one-third of the Department's psychiatrists are either engaged in an administrative capacity or in the treatment of patients on an outpatient basis. Thus, many hospital areas, particularly in chronic, long term wards, continue to have minimal employee-patient ratios.

Available data indicate that, if current programs remain unchanged, the number of admissions to these hospitals will continue to increase ten percent or more per year. This can be expected to produce a gradual rise in the proportion of beds occupied by acutely ill patients receiving short-term treatment. Based on these facts, a continuing increase in employee-patient ratios is imperative to maintain present levels of services.

* Brownsville, Eastern Shore, Springfield and Spring Grove

LENGTH OF HOSPITALIZATION

More than 40 percent of the 11,997 patients admitted to Maryland's state-operated psychiatric hospitals during the 1968 fiscal year were discharged within one month after onset of hospitalization. Nearly 70 percent returned to the community within half a year and a major proportion of the remainder had left the hospital on long-term leave preparatory to ultimate discharge. At the same time, the decrease in the proportion of geriatric admissions and the early release of most other patients produced a steady decline from 8.2 in 1948 to 2.9 in 1968 in the percent dying during the first six months of hospitalization.

	YEAR ADMITTED			
	1968	1963	1958	1948
NUMBER ADMITTED	11,997	7,257	4,145	2,100
STATUS AFTER SIX MONTHS (PERCENT)				
DISCHARGED	69.4	50.0	30.2	14.6
LESS THAN 1 MONTH	41.0	21.6	11.1	7.8
1 - 5 MONTHS	28.4	28.4	19.1	6.8
DEAD	2.9	4.8	6.0	8.2
UNDER HOSPITAL SUPERVISION*	27.7	45.2	63.8	77.2

A number of factors relate to the reduction in average length of hospitalization. Within the hospitals, rising employee-patient ratios, the current emphasis on drug therapy, other new treatment techniques and modalities have played an important role. In the community, a continuing increase in the number and variety of available supportive services has enabled hospitals to release patients earlier. At the same time, as illustrated by the following data, admissions are gradually shifting from those requiring custodial services for chronic illnesses to the acutely ill admitted for short-term intensive treatment.

1. The proportion of voluntary admissions is increasing in each hospital and, to a lesser extent, among many diagnostic categories of patients. Last year, 36.8 percent of the 11,997 patients entering these facilities were self-admitted. This percentage was 31.1 in 1963.

2. The proportion of admissions with a diagnosis of schizophrenia or other psychotic disorders declined from 31.9 percent in 1963 to 17.3 percent in 1968. During the same time period, the proportion of all admissions for the treatment of alcoholism increased from 30.2 percent to 49.2 percent. Most alcoholics are released after a brief hospitalization.

3. The average age of admissions is decreasing in many diagnostic groups. Admissions now occur more frequently during the earlier, more acute phase.

Latest available data indicate that admissions continue at a record level and can be expected to rise ten percent or more per year. In order to handle this increasing patient load in presently available facilities, it is essential that the average period of hospitalization be further reduced. This can be achieved only through increasing support for hospital programs and the close coordination of all inpatient and community services.

* In hospital and on long-term leave

RETENTION AND RELEASE RATES OF GERIATRIC ADMISSIONS

Ten percent of all persons 65 years of age or older entering Maryland's mental hospitals died within four weeks after admission and mortality exceeded one-third within one year. An additional one-third were discharged or placed on long-term leave. The retention and release rates of the 931 geriatric patients admitted during the year ending June 30, 1965 are summarized in the following table.

	CUMULATIVE PERCENT			
TIME PERIOD	DIED IN HOSPITAL	DISCHARGED FROM HOSPITAL	PLACED ON LONG-TERM LEAVE	PERCENT IN HOSPITAL AT END OF EACH PERIOD
LESS THAN 7 DAYS	2.5	1.3	0.5	95.7
7-27 DAYS	9.9	6.0	3.1	81.0
1-3 MONTHS	24.0	11.6	11.6	52.8
4-6 MONTHS	29.0	12.7	15.0	43.3
7-11 MONTHS	35.4	14.2	18.2	32.2
1-3 YEARS	47.4	16.2	22.6	13.8

Of these 931 patients, 47.4 percent have now died in the hospital, 38.8 percent have been discharged or placed on long-term leave with the remaining 13.8 percent still hospitalized. While many of the 361 released patients are now in the community or in nursing homes, some have died or been rehospitalized.

These data reflect a mortality rate very greatly exceeding comparable statistics for the general population which can not be explained by socio-economic variations alone. They indicate that many of these older residents are admitted with concomitant major physical and mental illnesses and find the sudden transition from community to hospital traumatic. Four out of five had not previously been under psychiatric care and their current condition was diagnosed as primarily related to old age. As such, they raise dual questions regarding the propriety of accepting such individuals as mental hospital patients and the need for more appropriate community facilities.

Currently, 2,400 of the 7,800 patients in Maryland's mental hospitals (or thirty percent of the total) are geriatric. Primarily because of excess mortality among recent admissions, only 18.7 percent have been under care for less than one year. Conversely, 44.0 percent have been hospitalized continuously for ten years or more. Most in this later group were admitted at an earlier age for psychotic disorders and a significant reduction in their number is dependent on minimizing chronicity in hospitalized patients. The success of efforts to reduce the number of geriatric admissions is dependent primarily on providing alternative community based preventive and treatment programs. Of major importance is the establishment, expansion and improvement of state licensed and inspected nursing homes and the development of services in general hospitals for the treatment of concomitant physical and mental illnesses.

THE HOSPITALIZED GERIATRIC PATIENT

In 1950 there were 12 million Americans aged 65 and older; by 1960 this number had increased to more than 16 million and it is now estimated to have reached 20 million. While the 275,000 Maryland residents in this age group represent 7.5 percent of the state's total population, patients 65 years of age or older currently occupy 29.9 percent of all beds in Maryland's four regional mental hospitals. The distribution of these 2,406 patients by diagnosis and by length of hospitalization is shown in the following table.

LENGTH OF HOSPITALIZATION	TOTAL	DISEASES OF SENIUM	OTHER BRAIN SYNDROMES	PSYCHOTIC DISORDERS	ALL OTHERS
Less Than 1 Month	76	45	9	7	15
1-11 Months	380	271	48	36	25
1-4 Years	649	490	78	51	30
5-9 Years	226	111	47	61	7
10 Years or More	1,075	81	135	724	135
TOTAL	2,406	998	317	879	212
Median (Years)	7.2	2.5	7.5	10+	10+

These data indicate that geriatric patients can be divided into two broad categories of nearly equal size. The patients who were first hospitalized in old age have been under continuous care for relatively short time periods and were primarily admitted for diseases of the senium. The patients first hospitalized at a younger age have been under continuous care for relatively long time periods and were primarily admitted for psychotic disorders.

In 1966 there were 963 admissions in this age group while 250 patients became 65 while hospitalized. At the same time, it accounted for 437 discharges and 764 deaths. A significant reduction in the number of these older admissions and resident patients is attainable through a coordinated program relating the following areas:

1. Imaginative services in the mental hospital designed to minimize the number of patients who become chronic.
2. Establishment, expansion and improvement of state licensed and inspected nursing homes and other suitable alternatives to hospitalization.
3. Development of services in general hospitals for the concomitant treatment of physical and mental illnesses.
4. Development and expansion of supportive community services and programs, such as meals on wheels and golden age clubs.
5. Providing financial independence and resultant self-esteem through Social Security and Medicare.
6. Elimination of involuntary automatic retirement at specified age levels.

THE HOSPITALIZED ADOLESCENT

Last year more than 400 children between the ages of 12 and 17 were under care in Maryland's state mental hospitals. This is equal to one out of every 1,000 Maryland residents in this age group.

The following table shows the distribution of resident patients in this age group (as of July 1, 1968) by diagnosis, age and length of hospitalization. Half were diagnosed as transient situational personality disturbances, one out of six as psychotic and one out of ten as personality disorders. Although most were recent admissions, a number had been under continuous inpatient care for extended time periods.

	REPORTED DIAGNOSIS				
AGE AND LENGTH OF HOSPITALIZATION	TOTAL	PSYCHOTIC DISORDERS	PERSONALITY DISORDERS	TRANSIENT SITUATIONAL PERSONALITY DISTURBANCES	ALL OTHERS
12-14 Years of Age	81	13	8	47	13
-1 Month	10	1	1	6	2
1-11 Months	53	10	6	30	7
1 Year	10	1	1	7	1
2 Years Or More	8	1	-	4	3
15-17 Years of Age	158	26	17	74	41
-1 Month	18	1	2	10	5
1-11 Months	88	15	12	42	19
1 Year	31	3	2	16	10
2 Years or More	21	7	1	6	7

The adolescents in state mental hospitals represent only a small proportion of those seen in psychiatric facilities. Data available through the Maryland Psychiatric Case Register indicate that 11.9 percent of all admissions 10-17 years of age were to state hospitals, 6.3 percent to other inpatient facilities, 56.1 percent to county operated clinics and 25.6 to other community centers. However, they do represent a major portion of those receiving treatment since many of the adolescent admissions to outpatient facilities are seen only for testing, evaluation and diagnosis.

A study released in 1962 indicated a minimum need for 500 residential beds for children[1] -a number far in excess of the then available resources. Privately operated facilities, such as Linwood, Child Study Center and Christ Child Institute, have a current capacity of 45. The Department, in addition to its Institute For Children which now has 85 patients (most are less than 12 years of age), now has separate units for adolescents with a combined capacity of 66 at the Crownsville and Spring Grove hospitals. The former has also established a day care program for a small number of disturbed children from one county (Anne Arundel). However, because of this shortage the majority of adolescents continue to be treated on the same wards with adult patients - a policy which is not believed to be conducive to the recovery of either group. Efforts to remedy this chronic deficiency must involve additional construction and staffing, both in state hospitals and in other facilities, as well as the close coordination of services with schools and all other present and proposed community resources. In part, the need for additional inpatient units for children will shortly be met through the transfer of the Institute for Children from the grounds of Rosewood to a much larger site in southwest Baltimore.

[1]HEALTH AND WELFARE COUNCIL OF THE BALTIMORE AREA, INC. - Residential Psychiatric Treatment For Children In Maryland.

DIAGNOSTIC TREATMENT TRENDS

Nearly half of the 11,997 admissions to Maryland's psychiatric hospitals in 1968 were for the treatment of alcoholism. The number of such admissions has more than tripled in the last six years (from 1,785 in 1962 to 5,957 in 1968). Preliminary data for 1969 indicate that a majority of the 14,085 admissions were alcoholics. However, since virtually all are released after a short period of hospitalization, the proportion of all residents diagnosed as alcoholics increased also but reached only 10.5 percent by 1968.

	ADMISSIONS DURING YEAR		RESIDENT PATIENTS AT END OF YEAR	
PSYCHIATRIC DIAGNOSIS	1968	1962	1968	1962
TOTAL - NUMBER	11,997	6,221	7,624	7,945
PERCENT	100.0	100.0	100.0	100.0
ALCOHOLISM	49.2	28.6	10.5	5.6
OTHER PERSONALITY DISORDERS	8.2	6.2	4.0	3.0
PSYCHONEUROTIC REACTIONS	6.3	6.8	2.5	1.9
SCHIZOPHRENIA	14.3	27.8	40.8	46.9
OTHER PSYCHOTIC DISORDERS	3.0	5.7	4.9	6.5
DISORDERS RELATED TO OLD AGE	5.3	11.7	13.9	14.1
MENTAL RETARDATION	1.1	2.5	7.3	9.7
ALL OTHERS	12.6	10.7	10.1	12.3

The number of admissions with a diagnosis of schizophrenia declined slightly from 1,738 in 1962 to 1,730 in 1968. Proportionally, this represented a drop from 27.9 to 14.3 percent, the lowest level in recent years. Although the number of chronic, long-term schizophrenics has been decreasing for some time, they continue to occupy two out of every five beds. A similar trend occurred for patients with other psychotic diagnoses. In 1968 these accounted only for 3.0 percent of all admissions and 4.9 percent of all residents.

Admissions for disorders related to old age have gradually decreased in recent years and are now only 5.3 percent of all patients entering care. This undoubtedly reflects the expansion in nursing homes and other community care facilities. Most remain hospitalized until ultimate death and they occupy 13.9 percent of all hospital beds.

Although Maryland has two hospitals for the mentally retarded, there were 129 retarded admissions and 553 resident patients in psychiatric hospitals during 1968. Most retarded residents have been hospitalized for some time and releases are mainly among recent admissions. The decline in the number of retardates in psychiatric hospitals is mainly due to deaths and to transfers to Rosewood and Henryton.

While most admissions are now for the short-term treatment of acute nonpsychotic disturbances, the majority of state hospital beds continue to be occupied by chronic, long-term psychotic patients. Since the number of releases in this group continues to be small, it must be expected that they will require a substantial proportion of hospital services in future years unless new methods of treatment and care are available.

IS THERE A REVOLVING DOOR?

Data from Maryland's five state operated mental hospitals indicate that the concept that most alcoholics have a continuing series of admissions is not based on fact. During the year ending June 30, 1967, 3,690 persons had a total of 5,166 admissions to these facilities in which they received a primary diagnosis of alcoholism. Of these 3,690, 2,800 (or 75.9 percent) were hospitalized once during this 12 month period and 578 (or 15.7 percent) were admitted twice. Only 66 (or 1.8 percent) had five or more admissions. Further, 1,521 (or 41.2 percent) of all patients were admitted once during this year and had not been previously hospitalized in a psychiatric facility.

The distribution of these individuals by race, sex and number of admissions is shown in the following table:

	Total	White Male	White Female	Nonwhite Male	Nonwhite Female
Number of Admissions	5,166	3,349	481	1,176	160
Number of Persons Admitted	3,690	2,279	358	904	149
1 Admission	2,800	1,675	276	709	140
2 Admissions	578	374	58	139	7
3 Admissions	170	116	13	39	2
4 Admissions	76	56	7	13	-
5 Admissions	34	27	3	4	-
6 Admissions	17	17	-	-	-
7 Admissions	5	4	1	-	-
8 Admissions	6	6	-	-	-
9 Admissions	3	3	-	-	-
10 Or More Admissions	1	1	-	-	-
Rate*	163.3	242.2	36.7	548.8	87.0

Proportionally, nonwhite rates were more than twice as high as comparable figures for both white males and females. In part, this was related to the greater availability and use by the latter group of alternate treatment resources. Also, Negroes have been hospitalized at an earlier stage of the illness. While 23.9 percent of the 904 nonwhite males were reported as acute alcoholics, 14.7 percent of the 2,279 white males received this diagnosis. Conversely, 64.9 percent of the nonwhite males and 77.1 percent of the white males were stated to be addicted to alcohol. These figures appear to indicate varying incidence rates of the different levels of alcoholism as well as selective handling by police and other commitment sources.

Alcoholics are currently estimated to occupy one out of every nine state mental hospital beds and to account for a majority of all admissions. These figures represent a continuing, substantial increase in recent years. While it is not known whether or not these data reflect a growing total number of alcoholics, most of this rise in admissions for alcoholism has been concentrated in the age groups under 45. It would therefore appear that this upward trend will continue if present conditions persist. One possible alternative is the development of preventive programs, particularly among young state residents, concurrently with the large scale expansion of coordinated, community centered treatment facilities.

*Number of persons admitted per 100,000 estimated population 18 years of age or older in specified race-sex group.

THE SCHIZOPHRENIC PATIENT

Schizophrenia is the most frequently noted diagnosis in Maryland's psychiatric hospitals and clinics with nearly one-fourth of all patients reported to have this disorder. In the state operated hospitals, 40.7 percent of all beds are occupied by schizophrenics and they comprise 56.9 percent of all patients who have been hospitalized continuously for five years or more.

The following table shows the latest available data on the one day prevalence of schizophrenic patients in all inpatient and outpatient facilities reporting to the Maryland Psychiatric Case Register by age and major diagnostic subgroup. Of these 5,855, 65 percent were in a state hospital on that date. Paranoid and chronic schizophrenics, the two largest groups, accounted for 60 percent of these cases. Acute and childhood schizophrenia were reported for less than five percent of all cases. Rates increased to a maximum between 45 and 64 years of age after which they decreased slightly.

DIAGNOSTIC SUBGROUP	TOTAL	AGE (IN YEARS) 5-14	15-24	25-44	45-64	65 AND OVER
PARANOID	2,217	-	58	885	947	327
CHRONIC	1,188	2	115	658	348	65
CATATONIC	803	-	71	363	298	71
HEBEPHRENIC	500	-	8	78	228	186
ACUTE	221	2	62	131	21	5
CHILDHOOD	41	24	17	-	-	-
OTHER	885	4	60	287	382	152
TOTAL	5,855	32	391	2,402	2,224	806
RATE PER 100,000 ESTIMATED POPULATION	168.9	4.4	74.6	262.7	338.2	326.7

In the eight years since the establishment of the Maryland Psychiatric Case Register, an estimated 18,000 individuals (or one out of every 210 State residents) were reported to have had one or more treatment episodes for schizophrenia. The proportion of the total population under care was slightly higher for females than for males and considerably higher for nonwhites than for whites. However, the highest rate was noted for white males between the ages of 35 and 44 who were separated from their wives with more than two percent of these Maryland residents under treatment for schizophrenia.

The types of schizophrenia were first classified and described by Emil Kraepelin more than 50 years ago. A number of studies since that time have reported considerable variation in its frequency of occurrence. Available Register data for Maryland indicate an annual incidence rate of approximately 40 (per 100,000 estimated population), or nearly 1,500 new cases per year. This number indicates that it is one of our major disease entities-particularly since it is frequently a chronic condition first observed at an early age. While psychotherapy, drugs and available supportive services have enabled increasing numbers of schizophrenics to function as family and community members, the continuing need is for expanded research related to the causes, prevention and management of this illness.

ON THE HOSPITALIZATION OF DRUG ADDICTS

A record 316 admissions with a diagnosis of drug addiction were reported last year by Maryland's mental hospitals. An additional 26 were admitted for acute drug intoxication. These 342 admissions, by 314 persons, in most cases involved a single treatment episode. Their distribution by race, sex and number of admissions during the year is shown in the following table.

	TOTAL	WHITE MALE	WHITE FEMALE	NONWHITE MALE	NONWHITE FEMALE
NUMBER OF ADMISSIONS	342	126	39	138	39
NUMBER OF PERSONS ADMITTED	314	115	39	126	34
1 ADMISSION	289	105	39	115	30
2 ADMISSIONS	22	9	-	10	3
3 ADMISSIONS	3	1	-	1	1
RATE*	14.0	11.8	3.9	73.2	19.2

Of these 314 persons admitted, 78.1 percent lived in Baltimore City, 76.8 percent were male, 83.6 percent were less than 35 years of age, 71.9 percent were single, separated or divorced and 64.6 percent reported no previous hospitalization in a psychiatric facility. Proportionally, admissions were in the ratio of six to one between nonwhite and white males and five to one between nonwhite and white females.

Although the Department collects data on drug abuse or dependency of all patients, the 524 cases reported last year probably represent an underenumeration since this may not be recognized or noted in each instance. Of these 524 patients, 100 were users of two or more specified drugs. The major categories noted were narcotics - 386, depressants - 125, stimulants - 62, and hallucinogens - 48. That is, more than three-fourths were stated to be users of narcotics, primarily heroin.

As with alcoholics, successful treatment is difficult since it requires complete withdrawal, motivation necessary for continued abstinence, development of constructive influences and resolution of underlying factors related to the problem. In the United States the most noted treatment facilities are maintained by the National Institute of Mental Health at Lexington, Kentucky and Fort Worth, Texas. They have reported that only a small proportion of former patients manage to abstain from drugs for any extended time period.

Ultimate efforts to minimize the number of addicts are dependent on a two-fold program for the prevention of new cases and the successful treatment of present users. The former depends on continuing efforts to determine the addictiveness of various drugs, to reduce available supplies, and to resolve socio-economic and psychological factors relating to initial drug use. The latter requires the development of closely coordinated treatment and aftercare services involving public and private agencies as well as organized groups of former users such as Addicts Anonymous and Synanon. Such efforts are now being developed in Maryland through a concerted program inaugurated during the current year.

* Number of persons admitted per 100,000 estimated population 18 years of age or older in specified race-sex group.

VOLUNTARY ADMISSIONS

The number of patients who were self-admitted to Maryland's psychiatric hospitals reached a record 4,412 (or 36.8 percent of all admissions) during the 1968 fiscal year. The following table shows that much of this rise is spurious and primarily reflects the rapid growth in admissions for the treatment of alcoholism. As indicated, the number of these patients has nearly tripled in the last five years and they now account for 49.7 percent of all admissions as compared with 28.7 in 1962. Alcoholics have a higher than average percentage of voluntary admissions. The increasing proportion of total admissions with this diagnosis has therefore produced a concomitant rise in the number and percentage of total voluntary admissions. Within each of the diagnostic categories shown, the proportion of self-admissions remained virtually unchanged between 1962 and 1968.

REPORTED PRIMARY DIAGNOSIS	NUMBER OF ADMISSIONS		PERCENT VOLUNTARY IN EACH DIAGNOSTIC GROUP	
	1968	1962	1968	1962
TOTAL ADMISSIONS	11,997	6,221	36.8	28.1
ALCOHOLISM	5,957	1,785	46.6	44.4
PSYCHONEUROTIC REACTIONS	757	424	50.6	52.8
OTHER PERSONALITY DISORDERS	737	410	29.3	34.4
SCHIZOPHRENIA	1,725	1,738	29.1	19.2
OTHER PSYCHOTIC DISORDERS	359	354	38.2	33.6
DISORDERS RELATED TO OLD AGE	647	730	7.3	5.9
MENTAL RETARDATION	129	157	20.9	10.2
ALL OTHERS	1,686	623	19.2	13.2

A number of other factors are also related to the relative frequency of voluntary admissions. Among these are:

1. PREVIOUS HOSPITALIZATION STATUS - 33.0 percent of admissions with no reported prior psychiatric hospitalization and 39.5 percent of readmissions were voluntary. Excluding alcoholics, these percentages were reduced to 24.0 and 30.3, respectively.

2. RACE AND SEX - The percentage of voluntary admissions varied from 40.6 for white males to 36.4 for white females, 30.8 for nonwhite males and 28.9 for nonwhite females. This sex difference is mainly related to a seven to one male-female ratio in admissions for alcoholism. The racial variations, however, reflect a continuing greater use of the voluntary admission procedure by white residents.

3. AGE - Voluntary admissions were relatively most frequent in the age group 25 to 44 (41.5 percent) followed by those between 45 and 64 years of age (38.5 percent). In the youngest age group, under 25, 30.8 percent of admissions were voluntary. Among those 65 years of age or older, where most admissions are for problems related to old age, only 7.0 percent were voluntary.

Many individuals requiring psychiatric hospitalization have sufficient recognition of their illness to voluntarily accept treatment services. Since this initiative is considered to be a potentially positive factor in the treatment outcome, major efforts to encourage use of this procedure are warranted.

THE LONG-TERM PATIENT

Half of all beds in Maryland's mental hospitals are occupied by patients who have been under continuous care in the same facility for five years or more. As shown in the following table, 64 percent of these 3,895 individuals were reported to be psychotic. Of the other 1,420, 38.0 percent were diagnosed as retarded, 14.4 percent as convulsive disorders and 14.2 percent as diseases of the senium. Their average (median) age at the time of admission was 32.5 years and is now 52.1.

		AGE AT ADMISSION			
CURRENT AGE AND DIAGNOSIS	TOTAL	LESS THAN 25	25-44	45-64	65 AND OVER
TOTAL	3,895	905	1,981	762	247
PSYCHOTIC	2,475	552	1,430	428	65
LESS THAN 45	459	248	211	-	-
45-64	1,243	255	818	170	-
65 AND OVER	773	49	401	258	65
NONPSYCHOTIC	1,420	353	551	334	182
LESS THAN 45	297	225	72	-	-
45-64	605	112	349	144	-
65 AND OVER	518	16	130	190	182

The reported median length of hospitalization of these patients is 19.6 years. Based on available expenditure figures for this period, this is equivalent to an average cost per person in excess of $25,000. That is, 100 million dollars have already been spent for the care and maintenance of this group. Currently, six percent of long-term patients are released each year with this discharge rate decreasing with increasing length of hospitalization. If this pattern remains unchanged, most of these individuals can be expected to remain hospitalized 15 to 20 more years until their ultimate death. On the basis of current cost trends, this represents an additional expenditure per patient exceeding $35,000.

The number of these long term patients has declined by approximately 200 annually in recent years and is now at the lowest level. In 1960, for example, there were 5,016 such patients. Further continuing reduction in the size of this group can be anticipated since the number of patients becoming chronic in the hospital is now small. Efforts to accelerate this trend are dependent on the development and expansion of closely coordinated and centrally directed programs to:

1. Counter symptoms and conditions leading to long-term hospital stay. Many patients admitted for acute disturbances eventually become chronic and custodial unless continuing efforts are made to channel these individuals into a functioning, community setting.

2. Release and habilitate inpatients who have been hospitalized for extended periods. Many of these could be discharged if adequate supportive community programs such as nursing homes, day and night centers and sheltered workshops were available in conjunction with continuing psychiatric services.

ADMISSION RATES AT RECORD LEVEL IN ALL AGE GROUPS

Admission rates to Maryland's state operated mental hospitals increased in all age groups between 1962 and 1968. That is, admissions proportionally increased much faster than the general population. As shown in the following table, rates increased half or more in all age categories under 65 and rose at a somewhat lower percentage in the two upper age groups. The total admission rate increased 59.8 percent (from 224.4 to 358.7 per 100,000 Maryland residents five years of age or older) during this six year period. Preliminary estimates for the current 1969 fiscal year indicate a further rise in the admission rate to approximately 410.

AGE-SPECIFIC ADMISSION RATES*-FISCAL YEAR

AGE GROUP	1968	1966	1964	1962	PERCENTAGE CHANGE (1968 vs. 1962)
TOTAL-NUMBER	11,997	9,673	7,871	6,221	+92.8
RATE	358.7	306.6	265.6	224.4	+59.8
5-14	23.5	28.3	17.5	15.8	+48.7
15-24	281.9	230.0	193.4	166.1	+69.7
25-44	538.4	468.1	403.7	343.5	+56.7
45-64	546.2	439.2	359.5	297.8	+83.4
65-84	340.0	348.2	364.9	325.8	+4.4
85 AND OVER	846.6	771.2	612.8	694.2	+22.0
MEDIAN AGE	41.7	41.3	41.5	41.4	+0.3

*Number of admissions per 100,000 estimated Maryland residents in specified age group.

Comparable data have been reported from most other states. Primarily this upward movement reflects the growth in the number of admissions for short-term intensive treatment of acute nonpsychotic disturbances together with the increase in the number of patients requiring multiple episodes of care. Schizophrenia and other psychotic disorders accounted for 33.5 percent of the 6,221 admissions in 1962 and 17.4 percent of the 11,997 admitted in 1968. During this period, admissions for disorders related to old age decreased from 11.7 to 5.4 percent while admissions for acute conditions such as alcoholism, other personality disorders and psychoneurotic reactions rose from 40.5 to 62.1 percent. In 1962, 56.1 percent of all admissions reported no previous psychiatric hospitalization. By 1968 this had decreased to 41.8 percent. The current rate is 39.7 percent.

Since the median length of hospitalization of new admissions has been progressively reduced to less than two months, this has not produced a comparable rise in the number of resident patients. Rather, the 59.8 percent increase in admissions occurred concurrently with a decrease of 7.0 percent in the average number of hospitalized patients (from 8,291 in 1962 to 7,711 in 1968). The average size of the patient population for the current year decreased further to 7,451.

Mental hospitals are in a state of transition with a gradual shift from a chronic long-term custodial population receiving minimal care to an acutely ill patient group requiring maximum, high level professional services. This trend may be further accelerated with the development and expansion of community centered services and programs. Average daily expenditures per patient must therefore be expected to rise further and a continuing increase in employee-patient ratios is imperative if present treatment levels are to be maintained.

THE MENTALLY RETARDED IN PSYCHIATRIC HOSPITALS

Eight percent of the patient population in Maryland's psychiatric hospitals have a primary diagnosis of mental retardation. In addition, many patients with other diagnoses are also believed to be retarded. These 597 compare with the 3,084 currently under care at Rosewood and Henryton, the Department's two hospitals for the mentally retarded. The following table shows the distribution of these 597 by current age and by length of continuous hospitalization.

LENGTH OF CONTINUOUS HOSPITALIZATION	CURRENT AGE (IN YEARS)							
	TOTAL	-15	15-24	25-34	35-44	45-54	55-64	65 And Over
Less Than 1 Year	58	2	22	13	6	10	3	2
1 - 4 Years	95	1	22	20	18	15	12	7
5 - 9 Years	63	-	6	19	15	12	9	2
10 - 19 Years	85	-	-	19	28	10	15	13
20 - 29 Years	168	-	-	12	34	55	41	26
30 Years or More	128	-	-	-	2	21	42	63
Total	597	3	50	83	103	123	132	113
Median (Years)	19.7	0.9	1.5	7.2	14.5	22.6	26.6	30+

The number of retardates in psychiatric hospitals has declined from 694 to 597 in the last five years, mainly due to death and to the gradual transfer of patients to Rosewood and Henryton. The number who are discharged has been small (an annual average of 138 during the last five years) and does not exceed the number of such new admissions. Releases have been mainly among recent admissions. As shown here, most have been under care for some time with a median continuous hospitalization of nearly twenty years. This is substantially higher than the comparable figure for all other patients.

It should be recognized that mental disturbances in addition or related to the retardation are quite common among those who are in psychiatric hospitals. They differ from the patients admitted to Rosewood in that most are adults and are classified as mentally retarded with psychosis. Also, they probably contain a higher proportion of borderline retardates and a concomitantly lower proportion of those below this intelligence level. Their relatively high median age on admission (29.5 years) indicates that hospitalization may have been caused by a change in the patient's condition, by parental death or by other alterations in the family structure.

Psychiatric hospitals are acutely aware of long term retarded patients since these form a substantial proportion of the chronic population. Further efforts to reduce the size of this group are dependent on -

1. Additional construction in existing or planned hospitals for the retarded.
2. Stringent efforts to see that those whose primary reason for hospitalization is retardation are not admitted to psychiatric hospitals.
3. Expansion and coordination of nursing homes and other community facilities and resources.
4. Programs to assist families in maintaining retardates in their own homes.
5. Development of community based small residential homes for the mentally retarded.
6. Expansion of sheltered workshop resources in the community.

ON THE CARE OF THE MENTALLY SUBNORMAL

Maryland currently requires an additional 1,126 hospital beds for the retarded in order to meet the state's estimated minimum need. Although construction at Rosewood and the opening of Henryton has provided space for 770 patients since 1960, this has barely exceeded the increased need resulting from Maryland's burgeoning population. The average size of the patient population is now 16.9 percent above bed capacity, a slight reduction from the 20.3 percent noted in 1960.

FISCAL YEAR	BED CAPACITY*	AVERAGE SIZE OF PATIENT POPULATION	EXCESS PATIENTS	ESTIMATED BED NEED**	ADDITIONAL BEDS NEEDED
1960	1,873	2,254	381	3,017	1,144
1962	1,873	2,400	527	3,166	1,293
1964	2,073	2,616	543	3,353	1,280
1966	2,564	2,888	324	3,551	987
1968	2,624	3,089	465	3,692	1,068
1969	2,643	3,090	447	3,769	1,126

* BASED ON AN AVERAGE OF 70 SQUARE FEET OF BED SPACE

** ONE BED FOR EVERY 1,000 ESTIMATED TOTAL STATE RESIDENTS AS RECOMMENDED BY THE AMERICAN ASSOCIATION ON MENTAL DEFICIENCY.

A new facility now being built at Silver Spring, in the Washington metropolitan area, will have an initial capacity for 230 patients. Other planned and authorized construction at Rosewood, Beltsville and in a number of smaller units in different sections of the state will provide space for approximately 340 additional patients by 1972. However, since the minimum bed need is estimated to increase by then to 3,974, Maryland will still have a deficiency of at least 261 beds when the current building program is completed.

The above data provide one indication of the need for expanded support for mental retardation programs. Other available indices* show that Maryland, in comparison with other states, ranked 23 in average expenditure per patient, 30 on the number of beds per 1,000 total residents and 32 on the ratio of personnel to patients. On each of the above factors, Maryland was below the national average.

Since Maryland's total population is growing by approximately 65,000 per year, it must be anticipated that the demand for inpatient services will similarly increase. The immediate need therefore is for continuing construction together with improved staffing ratios in present and future facilities. Longer range efforts must relate to - 1) research and preventive programs for reducing the incidence of mental retardation, 2) increased training and educational programs for the retarded to permit maximum development of their potential and 3) establishment and expansion of closely coordinated community centered services such as day care centers, half-way houses, sheltered workshops, group care homes, small residential facilities and other suitable substitutes for hospitalization.

* National Institute of Mental Health-Provisional Patient Movement and Administrative Data-Public Institutions For the Mentally Retarded, July 1, 1967 - June 30, 1968.

PATIENT MORTALITY

Mortality among patients in Maryland's mental hospitals has remained at a high level in recent years despite a gradual, continuing shift from a chronic, long term population to one admitted for acute, short term treatment services. Last year 875, or 4.5 percent of all patients treated, died while hospitalized.

Related to this high rate is the large number of deaths within a short period after onset of hospitalization. One out of every seven deaths occurs during the first month after admission. It is apparent that many newly admitted patients, particularly the elderly, have major physical disabilities and illnesses, are poorly suited for mental hospital care and should more appropriately be placed in nursing type facilities or in homes with medical and other supportive services.

However, mortality rates appear to be high among patients regardless of whether death occurs while hospitalized or in the community after release. The following table from a recent study* shows the percent of some selected patient cohorts who died within eighteen months after admission to the three major Maryland state mental hospitals. It should be noted that six out of ten of these deaths occurred in the community after hospital release. Comparable figures for the total State population for an eighteen month period were supplied by the Maryland Health Department.

PERCENT DYING DURING 18 MONTH OBSERVATION PERIOD

AGE (IN YEARS)	TOTAL MARYLAND POPULATION	PATIENTS ADMITTED WITH A DIAGNOSIS OF: ALCOHOLIC DISORDERS	PSYCHOTIC DISORDERS	PSYCHONEUROTIC AND PERSONALITY DISORDERS
25-34	0.2	1.7	0.5	1.1
35-44	0.5	4.1	1.6	2.6
45-54	1.2	7.5	4.6	2.4
Total	0.6	4.9	2.0	1.9

As can be seen, mortality rates in each diagnosis-age group were substantially higher than comparable rates for the general population. This disparity was particularly pronounced among alcoholic patients where death rates were at least six times greater than similar rates for the total Maryland population. It should be recognized that many psychiatric hospital patients come from poor, deprived population groups concentrated in inner city areas where mortality rates are known to be higher than for the State as a whole. However, this by itself can not explain the very much larger patient death rates. A number of questions remain unanswered and further investigations regarding these are therefore indicated. This includes the following:

1. Is there a significant difference in the life expectancy of mental patients and comparable general population cohorts?
2. Is there a significant difference in the life expectancy of similar age-diagnosis groups treated in public hospitals, private mental hospitals and outpatient psychiatric facilities?
3. Are there any causes of death which contribute unduly to observed variations?
4. To what extent can mortality patterns among psychiatric patients be changed by closely co-ordinated community and hospital programs stressing the relationship of physical and mental illnesses?

lease And Return Rates For Patients In State Mental Hospitals Of Maryland. olic Health Rep. 81: 1095-1108 December 1966.

SUICIDE AND MENTAL ILLNESS

Fifteen percent of the 399 Maryland residents who committed suicide in 1964 were known to have been under care in a psychiatric hospital or outpatient facility. The 59 suicides among the 50,702 adults who had been under treatment in these facilities between July 1, 1961 and June 30, 1964 were equal to a rate of 116.4 (per 100,000) as compared with a rate of 15.4 for the remainder of Maryland's adult population. While these figures indicate that suicides were proportionally nearly eight times as frequent among present or former patients, they also show that only a small number of these deaths occurred among these individuals.

The following table, based on data from the Maryland Psychiatric Case Register, shows the distribution of these suicides by type and by the patient's latest reported diagnosis. A majority were reported to have had psychoneurotic or personality disorders while only three had a diagnosis of alcoholism.

		TYPE OF SUICIDE				
PATIENT'S LAST REPORTED DIAGNOSIS	TOTAL	INGESTION OF POISON	HANGING	GUNSHOT WOUND	JUMPING FROM HIGH PLACE	OTHER
Schizophrenia	19	2	4	7	5	1
Psychoneurotic Disorders	22	9	3	6	-	4
Personality Disturbances	9	1	2	4	1	1
Alcoholism	3	-	1	2	-	-
All Others	6	2	-	1	-	3
Total	59	14	10	20	6	9
Total Maryland Suicides	399	73	57	191	9	69
Percent Known To Have Been Under Care	14.8	19.2	17.5	10.5	66.7	13.0

Thirteen of these 59 deaths occurred while the patient was hospitalized. Five of these 13 resulted from jumping from a high place and represented a majority of the nine deaths of this type recorded in the state. Of the remainder, 19 (32.2%) occurred while on hospital leave or under clinic care and 27 (45.8%) after discharge from treatment.

Suicide has been characterized as a cry for help. That is, it is often a conscious or subconscious indication of an inability or unwillingness to face and resolve the problems we feel are confronting us. Louis I. Dublin in his book "The Facts Of Life" estimated that one out of every 70 American males and one out of every 220 females would ultimately commit suicide. Further, although the number of unsuccessful suicides is not known, it is believed that there are at least ten suicidal attempts for every successful suicide.

Suicide has merited close attention and interest since attempts at self-destruction could often be prevented and are a negation of our basic cultural and religious beliefs. One concrete result has been the establishment in some cities of special centers staffed by psychiatrists and other trained personnel where the would-be suicide can find professional help in meeting the problems confronting him. A facility of this type is now being sought in Baltimore. The development of comprehensive community mental health centers, by providing closer and more immediate mental health services, can also be expected to reduce the magnitude of this problem.

ACCIDENTAL DEATHS AND MENTAL ILLNESS

A total of 174 deaths due to accidents was reported to the Maryland Psychiatric Case Register in the three years from July 1, 1961 to June 30, 1964 among the 66,006 patients treated in a reporting inpatient or community facility at some time during this period. Of these 174, 103 occurred in a mental hospital and 71 after release or while under outpatient care. Falls, the leading cause of accidental deaths, occurred primarily among senile, hospitalized patients. Although these 174 deaths were only 3.9 percent of the 4,416 Maryland residents who died from accidents, these figures are equal to annual rates of 87.9 for patients as compared with 43.5 for the rest of the population.

	CAUSE OF DEATH						
LATEST REPORTED PSYCHIATRIC DIAGNOSIS	TOTAL	MOTOR VEHICLE	POISONING	FALLS	DROWNING	SUFFO-CATION	OTHERS
BRAIN SYNDROMES (EXC. ALC.)	76	4	3	49	1	9	10
PSYCHOTIC DISORDERS	29	4	1	11	2	7	4
ALCOHOLISM	33	5	6	11	3	-	8
PSYCHONEUROTIC AND PERSONALITY DIST. (EXC. ALC.)	25	12	2	4	2	-	5
ALL OTHERS	11	2	-	4	1	4	-
TOTAL	174	27	12	79	9	20	27
TOTAL MARYLAND DEATHS	4,416	1,768	217	930	240	92	1,169
PERCENT KNOWN TO HAVE BEEN UNDER PSYCHIATRIC CARE	3.9	1.5	5.5	8.5	3.8	21.7	2.3

It should be recognized that the above data do not include all accidental deaths among individuals who had ever received psychiatric care in these facilities since they exclude those whose treatment was terminated prior to July 1, 1961. However, this number is believed to have been relatively small.

An earlier newsletter* showed that suicides were proportionally more frequent among current or former mental patients than in the general population. While the accidental death rate is double the rate for Maryland's total residents, both of these causes accounted for only a small part of all deaths reported to the Register (136 and 174, respectively, out of 4,385). These data, plus the ten reported deaths due to homicide, indicate that mortality from violent causes is a relatively minor factor in the high death rates reported among individuals known to have been under psychiatric treatment. Further, the small number of deaths from motor vehicle accidents, poisoning and falls from one level to another would appear to run counter to the concept that many accidental deaths are disguised suicides.

A recent study** by the Register staff of retention, release and rehospitalization patterns among specified groups of patients admitted to Maryland's three major psychiatric hospitals indicated high mortality rates, particularly among alcoholics. Accidents was one of the causes of death where patient rates exceeded comparable population figures. These data indicate that many individuals admitted to psychiatric care also have physical disabilities and difficulties in functioning adequately in family and community settings.

* Suicide and Mental Illness

** Release And Return Rates For Patients In State Mental Hospitals Of Maryland-Public Health Reports, 81: 1095-1108, December 1966.

MORTALITY AMONG ALCOHOLICS

A total of 6,853 patients with a primary diagnosis of alcoholism were treated in Maryland's public and private inpatient and outpatient facilities in the three year period from July 1, 1961 to June 30, 1964. In addition, 1,969 individuals with other diagnoses were reported to have a drinking problem. Of these 6,853, 351 (or 5.1 percent) are known to have died while under care or after release by June 30, 1964. The following table, based on data from the Maryland Psychiatric Case Register, shows the distribution of these deaths by age at death and by cause.

REPORTED CAUSE OF DEATH	TOTAL	AGE AT DEATH (YEARS) 25-34	35-44	45-54	55-64	65 AND OVER
HEART DISEASE	101	2	7	33	29	30
CIRRHOSIS OF LIVER	46	5	18	14	7	2
ACCIDENTS	33	2	8	17	5	1
CANCER	30	-	4	9	12	5
PNEUMONIA & BRONCHITIS	29	2	7	10	5	5
ALCOHOLISM	16	1	4	7	4	-
VASCULAR LESIONS	12	-	2	5	1	4
SUICIDE	11	1	2	3	3	2
TUBERCULOSIS	9	-	1	7	-	1
ALL OTHERS	64	10	13	21	9	11
TOTAL	351	23	66	126	75	61
ALCOHOLICS UNDER CARE DURING PERIOD	6,853*	1,181	2,364	2,022	904	197
PERCENT KNOWN TO HAVE DIED	5.1	1.9	2.8	6.2	8.3	31.0

*185 Alcoholics Were Less Than 25 Years Of Age

As in the general population, heart disease was the most important cause of mortality, accounting for nearly 30 percent of all deaths. Thirteen percent were reported as due to cirrhosis of liver, the second most frequent cause. By comparison, 1.4 percent of all Maryland deaths during this time period were from this cause. Only four percent of all deaths from cirrhosis of the liver had been under treatment in a psychiatric facility during this three year period. Proportionally, accidents, pneumonia and bronchitis, alcoholism, suicide and tuberculosis were also more frequently reported as the cause of death among alcoholics than in the general population while cancer and vascular lesions occurred less often. However, only 21 of the 165 Maryland deaths from alcoholism had been reported to the Case Register as under care in a reporting facility. Of these 21, 16 had been diagnosed as alcoholics.

Nearly one-third of the alcoholics 65 years or older were dead at the end of this observation period. High rates were also indicated in all other age groups. Although these can not be strictly considered to be age-specific mortality rates since the time between admission and death was not computed, they are substantially higher than similar rates for the total Maryland population. They indicate that major physical illnesses are a frequent occurrence among alcoholics admitted to psychiatric care.

COMPARATIVE WHITE AND NONWHITE TREATED MENTAL ILLNESS RATES

Nonwhite admission rates to Maryland's state operated mental hospitals are 102.9 percent higher while nonwhite resident patient rates are 81.5 percent higher than comparable white statistics. Data for the year ending June 30, 1968 indicate that this relative excess occurred in virtually all diagnostic categories and among both males and females. They reflect a gap which has gradually widened in recent years.

	ADMISSIONS DURING YEAR		RESIDENT PATIENTS AT END OF YEAR	
PSYCHIATRIC DIAGNOSIS	WHITE	NONWHITE	WHITE	NONWHITE
TOTAL - NUMBER	8,622	3,475	5,603	2,021
RATE*	308.4	625.6	200.4	363.8
ALCOHOLISM	157.7	278.7	19.8	44.6
OTHER PERSONALITY DISORDERS	24.0	57.8	8.1	14.2
PSYCHONEUROTIC REACTIONS	22.0	25.4	6.0	3.8
SCHIZOPHRENIA	39.8	110.0	85.0	131.4
OTHER PSYCHOTIC DISORDERS	11.0	9.4	11.2	11.2
DISORDERS RELATED TO OLD AGE	17.8	27.0	28.0	50.0
MENTAL RETARDATION	2.6	9.9	12.0	39.2
ALL OTHERS	33.5	107.4	30.3	69.4

One of the factors believed to relate to this disparity is the increasing concentration of a majority of Maryland Negroes in Baltimore inner city slum areas where rates of major health problems are highest. As a result of continuing outmigration, less than ten percent of the State's white residents now live in these sections. Conversely, sixty percent of white residents and twenty percent of nonwhite residents currently live in the four suburban counties (Anne Arundel, Baltimore, Montgomery and Prince George's) where state hospital admission and under care rates are lowest. While most of the former migrated from Baltimore City and Washington, many of the latter reside in small, long established semi-rural communities. Present migration patterns indicate a continuation of these divergent trends.

Similarly, many white residents because of their greater financial resources can use other treatment services and facilities unavailable to most Negroes. For example, in 1968 the seven privately operated hospitals in Maryland had 2,185 white and 32 nonwhite admissions. Nonwhite admission rates to all inpatient services (state, other public and private) were 48.3 percent higher for nonwhites (716.9 vs. 483.3 for whites). However, while nonwhite males had a 73.2 percent higher rate than whites (1,078.5 vs. 622.8), female nonwhite rates were only 5.4 percent greater (365.8 vs. 347.2). In part, this difference reflects the greater nonwhite admission rate for alcoholism. Most of these patients are males.

It should be clear that these figures, and similar data reported from other states, can not provide any indication as to the relative frequency of mental illnesses among the white and nonwhite population segments since they pertain only to patients receiving treatment in specified facilities. The number untreated or receiving services through alternative resources, such as private psychiatric practice, is not known. They do however fortify the important point that traditional and continuing cultural, economic and social deprivation and inequity ultimately places major burdens on the entire community.

* Per 100,000 estimated population five years of age or older in specified race group.

ON BALTIMORE'S MENTAL HEALTH PROBLEMS AND NEEDS

The continuing increase observed for some time in the number of admissions to Maryland's mental hospitals has been primarily related to the growing need for inpatient treatment by Baltimore City residents. While admission rates have traditionally been higher in the city than in other areas of the state, this gap has widened appreciably in recent years. If presently existing conditions remain unchanged, it must be anticipated that this disparity will increase at an accelerating pace.

A D M I S S I O N R A T E*

FISCAL YEAR	BALTIMORE CITY	MARYLAND EXCL. OF BALTIMORE	FOUR SUBURBAN COUNTIES	NINE EASTERN SHORE COUNTIES	TEN OTHER COUNTIES
1963	377.7	156 0	137.3	275.3	139.2
1964	415.3	159.2	143.1	267.7	161.5
1965	457.0	167.1	150.8	295.0	156.8
1966	516.9	177.4	166.7	306.8	186.6
1967	643.1	179.5	171.4	297.9	169.9
1968	714.3	182.8	173.8	294.6	165.4

*Number of admissions per 100,000 estimated population in specified area and year.

Baltimore's population, as in most urban centers, is virtually stationary in size and accounts for a declining proportion of total state residents. While 28.8 percent of Maryland's population lived in the city at the beginning of 1963, this decreased to 23.0 percent by 1968. Despite this, 48.5 percent of the 7,257 state hospital admissions in 1963 and 54.1 percent of the 11,997 admissions in 1968 lived within the city confines. A similar upward trend has been noted in psychiatric outpatient units. These data reflect a general pattern of expanding health problems in Baltimore resulting from the white middle class mass exodus to suburban counties and their replacement in many cases by poor, culturally deprived and community dependent residents.

An earlier report*, based on data from the Maryland Psychiatric Case Register, showed that major variations existed also within Baltimore. This study reported that the proportion of the total population admitted to inpatient care (in all public and private facilities) during a three year period (1961-1964) ranged from 0.42 percent in an outlying area to 8.16 percent in an inner city tract. Rates for middle class sections in most cases did not differ appreciably from comparable figures for similar areas beyond the city limits. Differences in admission rates between Baltimore and surrounding counties were almost entirely accounted for by the very high rates in inner city slum tracts.

Endeavors to reverse presently existing trends should receive the active support of all state residents since Baltimore and the rest of Maryland are vitally inter-dependent. These efforts require the development and expansion of community centered mental health services in close coordination with other agencies and programs seeking to overcome the causes and effects of cultural, economic and social deprivation.

*Klee, Gerald D., Bahn, Anita K., Spiro, Evelyn and Gorwitz, Kurt; "An Ecological Analysis Of Diagnosed Mental Illness in Baltimore". Published in Psychiatric Research Report 22 of the American Psychiatric Association.

THE PROBLEMS OF THE INNER CITY

Data from the Maryland Psychiatric Case Register show that admission rates to state mental hospitals and to all psychiatric facilities are substantially higher in the central, inner core of Baltimore than in the city's outlying areas. As indicated in the following table, these areas were reported by the 1960 census to differ also in most socio-economic variables such as the educational and income levels of their populations.

	Inner City	Outside Inner City
Admission Rate*-All Facilities	1,095.9	632.2
State Hospitals	533.1	163.1
All Other Units	562.8	469.1
Percent Of Adults Who Are High School Graduates	28.2	40.7
Percent Of Families With Income Under $3,000	18.6	9.7

In recent years all cities have experienced a large scale, continuing out-migration of middle class residents from central areas to suburbs within and beyond their boundaries and a concomitant in-migration of residents with different cultural standards and lower economic means. Those who do not migrate are primarily the old, the community dependent and the less mobile. This population movement has produced a growing interrelated economic, educational and public health problem in Baltimore as in all other major cities. At the same time, geographic dispersion has minimized social contact between population groups and reduced middle class awareness and understanding of the problem's magnitude and implications.

Infant mortality rates, the percentage of premature deliveries with no prenatal care, as well as morbidity and mortality rates from most communicable diseases are all highest among residents of overcrowded inner city slums. Hollingshead and Redlich in New Haven, Faris and Dunham in Chicago and Srole and his associates in a more recent study in Midtown Manhattan have all reported a similar relationship between rates of known mental disturbances and socio-economic status.

A recently published study** which analyzed data for Baltimore City by census tracts reported that 1) high psychiatric admission rates, particularly for psychotic disorders, were associated with low economic levels and conversely, low psychiatric rates with higher economic levels 2) high psychiatric rates were found for tracts with high indices of migration, mobility and unemployment and with low educational levels and low skilled occupation, 3) rates for syphilis, tuberculosis, births with no prenatal care and illegitimate births were strongly associated with psychiatric rates 4) the high association with psychiatric rates was found for both adult crime and juvenile delinquency rates.

National recognition of the magnitude and seriousness of inner city slum problems has led to the development of concerted anti-poverty programs. The success or failure of these endeavors will have important bearings on future mental health needs, services and concepts. Active participation of all psychiatric agencies, in close coordination with other services, is therefore essential.

*Per 100,000 estimated population in specified area.

**Klee, Gerald D., etal.: An Ecological Analysis Of Diagnosed Mental Illness In Baltimore. Psychiatric Epidemiology and Mental Health Planning. Psychiatric Research Report 22 of the American Psychiatric Association, May 1967. pp. 107-137.

THE PROBLEMS OF THE RURAL COUNTY

A stationary, or declining, population with a higher than average median age; a substantial proportion of older people; a lack of employment opportunities which causes a continuing net out-migration of younger residents; a large number of migratory farm laborers; an unmet need for professional psychiatric personnel; a sparsity of community mental health facilities so that the state mental hospital often provides the only available treatment service for broad population segments - these are some of the facts that frequently characterize rural counties.

The 1960 census report indicated that the number of Maryland residents had increased 150 percent since 1910. However, virtually all of this was concentrated in the Baltimore and Washington metropolitan areas. During this 50 year time period, five of the state's 23 counties reported a population rise of less than 10 percent. Three other counties declined in population - one (Somerset) by more than 25 percent. These eight consisted of seven of the nine Eastern Shore counties and Garrett in the far western part of Maryland.

According to current estimates, 4.6 percent of the state's total population live in these eight counties. However, they accounted for 6.7 percent of resident patients in the six state operated psychiatric hospitals. Each of these counties had a patient rate at least one-fourth larger than the comparable rate for the rest of the state.

The Eastern Shore State Hospital at Cambridge is responsible for the inpatient care of the mentally ill in eight counties of the Eastern Shore. In recent years, its staff has worked actively to relate its program with hospitals, clinics and other community resources in the development of a continuum of mental health services. In this, it has served as a catalyst for the growth of a unique, coordinated program whose impact has been pronounced. The hospital population has declined by one-third in ten years and the former preponderance of chronic, senile patients has been substantially reduced. Although its catchment area accounted for 4.1 percent of all state hospital admissions in 1968, 6.6 percent of all clinic admissions were residents of these eight counties. Five years earlier these figures had been reversed with 6.4 percent of hospital admissions and 3.7 percent of clinic admissions residing in this area.

The problems of Maryland's rural counties has its counterpart in every section of the United States. The factors underlying their mental health problems and needs are inter-related with other basic issues and can ultimately only be resolved through coordinated efforts of education, health and social agencies. Prime consideration must be given to programs for minimizing the problems of low income, continuing population drain and a deficiency of professionally trained personnel.

MARYLAND'S PRIVATELY OPERATED PSYCHIATRIC HOSPITALS*

Nearly fifteen percent of all psychiatric inpatient admissions in Maryland last year were to the seven privately operated hospitals although these provide eight percent of available beds. A slightly larger number were reported to the Psychiatric Case Register as having been admitted to the Veterans Hospital at Perry Point and to other units not administered by the Department. The remaining seventy percent were to the six state psychiatric hospitals. Patient movement data for the year ending June 30, 1967 are summarized in the following table.

TYPE OF FACILITY	RES. PATIENT POPULATION 7-1-66	ADMISSIONS DURING YEAR**	DISCHARGES DURING YEAR**	DEATHS DURING YEAR	RES. PATIENT POPULATION 6-30-67
D.M.H. OPERATED	8,178	11,091	10,439	859	7,652
PRIVATELY OPERATED	869	2,284	2,281	33	839
OTHER INPATIENT***	1,635	2,757	2,667	57	1,668
TOTAL	10,682	16,132	15,387	949	10,159

Proportionally, Maryland has always had a substantial segment of its psychiatric patient population treated in privately operated facilities. One of these, the Seton Institute, has been in continuous existence since 1840. It is mentioned by Albert Deutsch in his book "The Mentally Ill In America" as the oldest religiously affiliated psychiatric hospital in the United States. Its history of service is exceeded in this state only by the Spring Grove State Hospital. In Maryland, as throughout the United States, the number of private hospitals has declined in recent years because of personnel shortages, rising costs and other related problems. However, since many of the remaining hospitals have increased their bed capacity, they have maintained their proportion of the total caseload.

Traditionally, the relatively high cost of hospital care in private facilities has produced a patient population with an excess of individuals having the following characteristics - white, female, in the middle years of life (25-54), middle and upper middle class admitted for the short term treatment of acute psychoneurotic reactions and personality disorders. Negroes, alcoholics, the senile and chronically ill appeared relatively infrequent. In more recent years the inclusion of psychiatric care in health insurance programs has broadened this population pool. At the same time, tranquilizing drugs, improved standards and the development of new treatment concepts and services have produced major changes in patterns of hospitalization, retention and release of state hospital patients.

Thus, individuals entering public or private psychiatric hospitals are now somewhat more comparable than they have been in past years. The quality and type of services received during hospitalization has also become more similar. Continuation of this trend should produce greater coordination of programs and result in better psychiatric services for all population segments.

* Brook Lane Center, Chestnut Lodge, Gundry Sanitarium, Seton Institute, Sheppard Pratt, Taylor Manor and Washington Sanitarium.

**Does not include placements on or returns from long term leave.

***One county operated, one V A. and three psychiatric units of general hospitals.

THE NATIONAL SCENE

Expenditures in the United States in 1968 for the maintenance of state and county operated mental hospitals exceeded one and one-half billion dollars.* This figure was larger than the total budget of Maryland and all but a few of the most populous states. It reflected a record increase of 162 million dollars, or 11.5 percent, over the previous year's comparable figure. Total costs have nearly doubled since 1958 and are now almost 50 percent higher than they were five years ago.

Hospital expenditures have continued to go up although the average number of patients in these facilities has decreased steadily. Nationally, a 24.4 percent decline in the patient population (from 546,337 to 412,818) occurred between 1958 and 1968. As a result, the average daily cost of caring for one patient rose from $4.04 to $10.47 during this ten year period. Maryland, with a reported figure of $11.30, continued to rank approximately midway, between the high of $36.06 for Alaska and the low of $4.81 for Mississippi. Despite patent improvements, these figures indicate a widespread continuing lag behind comparable cost data for general hospitals as well as for federal (V.A.) psychiatric hospitals.

FISCAL YEAR	AVERAGE SIZE OF PATIENT POPULATION	NET LIVE RELEASES	TOTAL EXPENDITURES	EXPENDITURE PER NET RELEASE
1958	546,337	161,884	$805,861,786	$4,978.02
1960	539,184	192,818	916,236,166	4,751.82
1962	519,742	230,158	1,033,567,884	4,490.68
1964	496,661	268,616	1,144,024,206	4,258.96
1966	460,910	308,636	1,300,380,295	4,213.31
1968	412,818	351,461	1,577,631,758	4,488.78
PERCENT CHANGE (1968 vs. 1958)	-24.4	+117.1	+95.8	-9.8

While these data reflect rising personnel-patient ratios, the current emphasis on psychopharmacology and other innovations in treatment services, they are primarily related to the rapidly increasing patient turnover resulting from shortened periods of hospitalization for new admissions and the transfer of many long term patients to nursing homes. As indicated in the above table, releases more than doubled between 1958 and 1968. In fact, this rise has been so large that the average expenditure required to produce one net release is now 9.8 percent less than it was ten years ago.

If present trends continue, the average daily cost per patient must be expected to rise ten percent or more per year even though the average total cost of each episode declines further. The only alternative to continuing, uninterrupted increases in state psychiatric hospital expenditures is to reduce drastically the size of patient populations by 1) providing community centered programs as an alternative to hospitalization, 2) further decreasing the average length of hospitalization 3) transferring chronic, custodial patients to nursing home type facilities and 4) developing and expanding aftercare services for released patients. These can be accomplished through closely coordinated and centrally directed programs offering a variety of community and hospital services to the mentally disturbed and through the implementation of current and new concepts for the prevention of mental illnesses.

*Office of Biometrics, National Institute of Mental Health, Provisional Patient Movement and Administrative Data-State And County Mental Hospitals-United States-July 1, 1967-June 30, 1968.

A REPORT TO THE FIFTEEN SOUTHERN STATES*

Hospital services for the mentally ill in the Southern states have progressed substantially in recent years. Statistics published by the Office of Biometrics of the National Institute of Mental Health, show that despite this marked improvement the Southern states continue to lag appreciably behind the rest of the United States. The net difference in average daily per patient expenditure is now higher than it has been at any time previously while the ratio of employees to patients continues to lag appreciably.

AVERAGE DAILY PER PATIENT EXPENDITURE	15 SOUTHERN STATES	REST OF UNITED STATES	NET DIFFERENCE	PERCENT DIFFERENCE
1958	$2.87	$4.42	$1.55	-35.1
1963	4.16	6.33	2.17	-34.3
1967	6.43	9.68	3.25	-33.6
1968	7.76	11.41	3.65	-32.0
NUMBER OF EMPLOYEES FOR EVERY 100 PATIENTS				
1958	25.3	32.8	7.5	-22.8
1963	33.1	39.6	6.5	-16.4
1967	42.0	52.7	10.7	-20.3
1968	46.1	54.9	8.8	-16.0

Total hospital maintenance expenditures by the 15 states more than doubled in this ten year period (from $139,000,000 in 1958 to $310,000,000 in 1968) and average daily per patient expenditures are now two and one-half times the 1958 figure. However, since comparable changes have occurred in the other 35 states, the South's relative position has remained essentially unchanged. In fact, the South's daily average in 1968 of $7.76 was exceeded by ten percent or more by all except one of the other 35 states. The seven states with lowest per patient expenditures were all in the South. Arkansas, which had the highest per patient per day cost among Southern states ($13.93), ranked fifteenth nationwide. Related to this, the average size of the patient population declined 18.1 percent (from 133,198 to 109,073) in the Southern states during this ten year span while the comparable figure for the rest of the country was 26.5 percent (from 413,139 to 303,745).

This disparity does not reflect a lesser interest and support for mental hospital programs. Rather, it is directly related to the relatively lower economic level of most Southern states. Latest figures released by the U.S. Department of Commerce indicate that per capita income in the South continues to be one-fourth lower than in the rest of the United States. This in turn has produced lower than average per capita expenditures for all state services.

The South has been characterized as an area in transition. Gradual economic and social development can be expected to produce in the mental health field a concomitant continuation of the progress experienced in recent years. However, it must be recognized that unless this is rapidly accelerated much of the South will perpetually continue to lag appreciably behind the rest of the United States.

*Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.